have to wait for more than the working draft to see a real impact on medicine.

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1 Collins F, Galas D. A new five-year plan for the US Human Genome Project. *Science* 1993;262:43-6.

- 2 Collins FS, Patrinos A, Jordan E, Chakravarti A, Gesteland R, Walters L. New goals for the US human genome project: 1998-2003. *Science* 1998;282:682-9.
- 3 Dunham I, Shimizu N, Roe BA, Chisoe S, Hunt AR, Collins JE, et al. The DNA sequence of human chromosome 22. *Nature* 1999;402:489-95.
- 4 Smaglik P. Genome leaders told to keep their eyes on the main prize. *Nature* 2000;404:111.
- 5 Zimmern RL. The human genome project: a false dawn? *BMJ* 1999;319:1282.
- 6 The Human Genome Project. *Curr Biol* 1999;9:R908-9.
- 7 Collins FS, Guyer MS, Chakravarti A. Variations on a theme: cataloging human DNA sequence variation. *Science* 1997;278:1580-1.
- 8 Drews J, Ryser S. The role of innovation in drug development. *Nat Biotechnol* 1997;15:1318-9.
- 9 Woodman R. Wellcome trust and drug giants fund gene marker database. *BMJ* 1999;318:1093.
- 10 Butler D, Smaglik P. Celera genome licensing terms spark concerns over "monopoly". *Nature* 2000;403:231.
- 11 Collins FS. Shattuck lecture—medical and societal consequences of the human genome project. *N Engl J Med* 1999;341:28-37.

Junior doctors' pay: a wake-up call to the NHS

The new pay deal will also improve doctors' and patients' health and safety

Next week junior doctors in the United Kingdom will vote on whether to accept a pay deal that was painstakingly negotiated on their behalf.¹ But this is no ordinary deal: a completely new framework for assessing payment has been worked out. It represents a fairer system of remuneration and will force hospitals to examine how they use junior doctors and, by implication, other healthcare professionals.

Under the proposed arrangements junior doctors will no longer suffer the ignominy of overtime paid at a fraction of the basic hourly rate.² Instead posts will be banded to reflect the number and timing of extra hours, intensity of work, and antisocial nature of duty commitments. Junior doctors will receive a salary supplement linked to the banding of the post. So, doctors working in band 1c posts—the least onerous—will receive a supplement of 20% and those in band 3 posts—the most onerous—a 60% supplement. Only doctors who work 40 hours or less between 8 am and 7 pm Monday to Friday will get no supplement.

The negotiators have worked hard to agree criteria for band allocation and to include safeguards to ensure that the system works fairly. No doctor will lose out through a fall in pay, and many will gain—at last—by being paid more fairly for the work they do.

The proposed changes go further than working out the basis for paying junior doctors. Limits to hours worked by junior doctors, agreed in the 1991 new deal, would become legally binding in contracts by August 2001 for preregistration house officers and by August 2003 for all other grades. Also, the salary supplements for all but band 1c posts are not static but will rise over the next two years. So the supplement for band 3 posts will rise from 60% in December 2000 to 70% in December 2001 and to 100% in December 2002.

It is these aspects of the proposals that are potentially the most far reaching and could affect the working patterns of many other staff. The United Kingdom has fewer doctors and nurses per capita than most other developed countries. Despite attempts to increase student numbers and retain nurses, this will continue for the foreseeable future. Broadly, there are two ways of coping with this chronic staffing crisis. One is to make health professionals work ridiculously long

and unsafe hours. The other is to place a premium on the safety of patients and staff and find more intelligent ways of working. Simply getting nurses to do the more mundane tasks that doctors do not like doing is not an option. Finding better ways of working will undoubtedly challenge assumptions and professional boundaries but may be a healthier option for both patients and staff. A 100% supplement for doctors working in band 3 could be seen as a fine on those hospitals that do not manage to reshape working practices.

Imagining how to work differently is difficult unless assumptions are challenged. Senior doctors worry that if junior doctors work fewer hours patients will not have continuity of care and juniors will miss out on some of the experience necessary in training. But the point about continuity of care is that it is the care that should be continuous, not the people delivering it. With shorter hours and more humane working patterns, all staff will have to be punctilious about handing over patient care. This means that trusts must develop systems that ensure safe handover of care. Working fewer, safer hours may enhance rather than reduce training; there is little value in exposure to lots of "experience" if the doctor is sleep deprived and has no time to assimilate the experience.

By including a staged increase in salary supplements the junior doctors have given hospitals a warning and, importantly, time in which to work out better ways of working. After such tenacious negotiations, junior doctors must make sure they cast their vote. This pay deal is important for the health as well as the salaries of junior doctors. But importantly it may leverage better, safer patient care. Leaders from management, nursing, and medicine need to start thinking about the implications for working practices. Let's hope they can be as innovative as the negotiators for the junior doctors and the Department of Health.

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1 Beecham L. UK junior doctors to vote on pay offer. *BMJ* 2000;320:824.

2 New pay offer—referendum. <http://web.bma.org.uk/homepage.nsf/htmlpagew/juniors> (accessed 2 May).

BMJ 2000;320:1224

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